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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,453	04/02/2007	Florence Rivera	434299-698	4203
46188	7590	12/16/2010	EXAMINER	
Nixon Peabody LLP P.O. Box 60610 Palo Alto, CA 94306			HENSON, DEVIN B	
			ART UNIT	PAPER NUMBER
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			12/16/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,453	Applicant(s) RIVERA ET AL.	
	Examiner DEVIN HENSON	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 18-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/5/06, 2/20/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-17, in the reply filed on 10/25/10 is acknowledged.

Claims 18-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/25/10.

Notice of Amendment

In response to the amendment filed on 10/25/10, amended claims 1, 3, 7, 11, and 15, original claims 2, 4-6, 8-10, 12-14, 16, and 17, cancelled claims 18-24, and new claims 25 and 26 are acknowledged.

Claim Objections

Claims 25 and 26 are objected to because of the following informalities: the claims read "the maximum dimension if less than". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 13 recite the limitation "the inlet". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-8, 10, 12-16, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin et al. (US Patent No. 5,855,801).

Regarding claim 1, Lin et al. discloses an in vivo diagnostic or therapy micro-device (10, 120) comprising:

a substantially longitudinal body (14) having a quadrilateral-shaped section, provided with at least one main canal (78, 122, 124) in the direction of its length, one input (18, 22) of which is located at a first end of the body (see Figures 1A, 8A, and 8B), and

a plurality of secondary canals (126) connected to at least one main canal and opening up sideways by lateral outputs (see Figures 8A and 8B and col. 10, lines 16-29).

Regarding claim 2, Lin et al. discloses one or more electrodes (84) located on an outside portion of the body,

one or more electrical connection pins (36) located at the first end of the body, close to the input to said canal (see Figures 1A, 8A, and 8B).

Regarding claim 10, Lin et al. discloses an in vivo diagnostic or therapy micro-device (10, 120) comprising:

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a substantially longitudinal body (14) having a quadrilateral-shaped section, provided with at least one main canal (78, 122, 124) in the direction of its length, one input (18, 22) of which is located at a first end of the body (see Figures 1A, 8A, and 8B), one or more electrodes (84) located on an outside portion of the body, one or more electrical connection pins (36) located at the first end of the body, close to the input to said canal (see Figures 1A, 8A, and 8B).

Regarding claims 4 and 12, Lin et al. discloses at least two parallel main canals (122,124; and see Figures 8A and 8B).

Regarding claims 5 and 13, Lin et al. discloses at least one of the main canals opening up to a second end (18) of the body, called the distal end, and the inlet into at least one main canal being funnel-shaped (see Figure 1 and col. 4, lines 25-30).

Regarding claims 6 and 14, Lin et al. discloses the body having two parallel opposite surface areas between the first and the second ends, and comprising a second bevel-shaped end (18, 86; and see Figure 1 and col. 4, lines 25-30).

Regarding claims 7 and 15, Lin et al. discloses the body having a square or rectangular section (14) in which each side has a maximum dimension of less than 900 μm and the longitudinal extension of the body being preferably between 0.5 cm and 3 cm (see col. 3, lines 53-57 and col. 4, lines 10-30).

Regarding claims 8 and 16, Lin et al. discloses the device being made of silicon (46; and see col. 4, lines 30-35).

Regarding claims 25 and 26, Lin et al. discloses the maximum dimension is less than 300 μm (see col. 3, lines 53-57 and col. 4, lines 10-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent No. 5,855,801).

Regarding claims 3 and 11, Lin et al. discloses the electrical connection pins (36) comprising micro-cavities made in the body of the micro-device (see Figures 1A-C). Further, Lin et al. discloses micro-device dimensions on the same scale (μm) as Applicant's claimed invention (see col. 3, lines 53-58). Although Lin et al. does not specifically teach cavities having a height and width between 10 μm and 50 μm , the claim would have been obvious because a person of ordinary skill at the time of the invention would have a good reason to pursue the known options within his or her technical grasp (i.e. etching a cavity with a height and width between 10 μm and 50 μm). If this leads to the anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense. Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to etch the cavities of Lin et al. to have a height and width between 10 μm and 50 μm , as a person with ordinary skill has a good reason to pursue the known options within his or her technical grasp. In turn, because the micro-device as claimed has the properties predicted by the prior art, it would have been obvious to make a micro-device having the specific cavity height and width between 10 μm and 50 μm .

Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US Patent No. 5,855,801) in view of Johnck et al. (US Publication No. 2003/0161572 A1).

Regarding claims 9 and 17, it is noted that Lin et al. does not specifically teach a micro-device further comprising a wave-guide. However, Johnck et al. discloses a micro-device further comprising a wave-guide (see [0009], [0028], and [0033]). It would

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have been obvious to one of ordinary skill in the art at the time of invention to modify the micro-device of Lin et al. to include a wave-guide, as disclosed in Johnck et al., so as to allow the micro-device to be used in absorption and fluorescence measurements (see Johnck et al.: [0007] and [0034]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVIN HENSON whose telephone number is (571)270-5340. The examiner can normally be reached on M-TH 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. H./

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12/14/10

/Max Hindenburg/

Supervisory Patent Examiner, Art Unit 3736